WHAT IS CLAIMED IS:

1. A method for transmitting a signal of a medium access control sublayer in a mobile communication system which has mobile and base stations for providing a bearer service, comprising the steps of:

a) deciding a bearer service profile type according to a bearer service combination type of said bearer service to provide said bearer service; and

b) setting a transport format indicator according to the decided bearer service profile type and appending a transport format combination indicator to a dedicated physical control channel.

2. The method as set forth in Claim 1, wherein said bearer service profile type includes a service type and a radio environment.

3. The method as set forth in Claim 2, wherein said service type includes said bearer service combination type and a bearer service class type.

4. The method as set forth in Claim 3, wherein said bearer service combination type includes a bearer service category defined by a combination of speech, circuit data and

-11-

packet data services, said bearer service category including any one of only said speech service, only said circuit data service, only said packet data service, a combination of simultaneous speech and packet data services, a combination of simultaneous speech and circuit data services, a combination of simultaneous packet data and circuit data services and a combination of simultaneous speech, packet data and circuit data services.

5. The method as set forth in Claim 3, wherein said bearer service class type includes any one of first to fourth classes, said first class having connection oriented and delay constrained characteristics for low delay data, said second class having variable bit rate, connection oriented and delay constrained characteristics for low delay data at a variable bit rate, said third class having connection oriented and delay constrained characteristics for long constrained delay data, said fourth class having connectless and delay unconstrained characteristics for unconstrained delay data.

6. The method as set forth in Claim 2, wherein said radio environment includes any one of an indoor environment model, an outdoor to indoor and pedestrian environment model and a vehicular environment model which are classified according to periodic, on-demand and threshold information.

-12-

7. The method as set forth in Claim 1, wherein said step b) includes the step of setting attributes of a dynamic part and semi-static part of transport formats according to said transport format indicator.

8. The method as set forth in Claim 7, wherein said attributes of said dynamic part include a transport block size and a transport block setup size.

9. The method as set forth in Claim 7, wherein said attributes of said semi-static part include a transport time interval, a type of channel coding, outer coding such as Reed-Solomon coding, outer interleaving, inner coding, inner interleaving and rate matching.

10. A method for transmitting a signal of a medium access control sublayer in a mobile communication system which has mobile and base stations for providing a bearer service, comprising the steps of:

a) allowing an application layer to decide a bearer service combination type of said bearer service;

b) allowing a radio resource control layer to measure a radio environment between said mobile and base stations;

c) allowing said radio resource control layer to decide a bearer service profile type according to the decided bearer

-13-

service combination type and the measured radio environment result and then assign a transport format combination set;

d) allowing said medium access control sublayer to select appropriate transport formats within the assigned transport format combination set; and

e) allowing a specific layer to set attributes of a dynamic part and semi-static part of the selected transport formats and append a transport format combination indicator to a dedicated physical control channel.

11. The method as set forth in Claim 10, wherein said step b) includes the step of determining whether said radio environment includes any one of an indoor environment model, an outdoor to indoor and pedestrian environment model and a vehicular environment model which are classified according to periodic, on-demand and threshold information.

12. The method as set forth in Claim 10, wherein said attributes of said dynamic part include a transport block size and a transport block setup size.

13. The method as set forth in Claim 10, wherein said attributes of said semi-static part include a transport time interval, a type of channel coding, outer coding such as Reed-Solomon coding, outer interleaving, inner coding, inner

A' Cont

interleaving and rate matching.

Add A'